PTO-1449 (Modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 0311.48526	SERIAL NUMBER 08/358,474
	APPLICANT Kyle, David J.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE December 19, 1994	GROUP ART UNIT ~~n/a~~ 1205

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
KJ	5,397,591	03/95	Kyle, et al.	426	602	2/90
	5,204,250	04/93	Shinmen, et al.	435	134	3/87
	4,874,629	10/89	Chang, et al	426	601	
	4,963,385	10/90	Antrim, et al	426	602	
	5,407,957	04/95	Kyle, et al. 514/547	~~435~~	~~134~~	2/90
	5,130,242	07/92	Barclay	435	134	9/90
	4,938,984	1990	Traitler, et al	426	580	
	4,526,793	07/85	Ingenbleek, et al	426	72	
KJ	4,851,343	07/89	Herbert, et al	435	134	

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO	
KJ	WO 92/13086	08/06/92	International Application			Yes	
	01/215,245	08/29/89	Japan			Yes	
	01/196,255	08/08/89	Japan			Yes	
	0 223 960	06/03/87	Europe			Yes	
	0 276 982	08/03/88	Europe			Yes	
	01/038 007	02/08/89	Japan			Yes	
	01/304 892	12/08/89	Japan			Yes	
	WO 89/00606	01/26/89	International Application			Yes	
KJ	WO 90/04391	05/90	" "				

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KJ	Shinmen, et al. (1989), "Production of Arachidonic Acid by *Mortierella* fungi," *Appl. Microb. Biotech.*, **31**:11-16
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KJ	Totani, et al. (1987), "The Filamentous Fungus *Mortierella alpina*, High in Arachidonic Acid," *Lipids*, **22**:1060

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KJ	4,670,285	06/87	Clandinin, et al	426	602	
	5,013,569	05/91	Rubin	426	585	5/90
	4,920,098	1990	Cotter, et al	514	2	
	4,868,001	09/89	Maruta	424	623	
	4,960,795	10/90	Salte, et al	514	560	
	4,911,944	03/90	Holub	424	635	
	4,526,902	07/88	Rubin	514	560	
	4,681,896	07/87	Horrobin	514	552	
KJ	4,792,418	12/88	Rubin	260	412	

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO	
KJ	0 269 351	06/88	Europe			Yes	
KJ	01/132,371	05/89	Japan			Yes	
	~~02/257,835~~	~~90/10~~	~~Japan~~			Yes	
KJ	0 140 805	05/85	Europe				No
	0 148 303	07/85	Europe				No
	0 231 904	08/87	Europe				No
KJ	0 296 751	12/88	Europe			Yes	

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KJ	Shimizu, et al. (1988), "Production of Eicosapentaenoic Acid by *Mortierella* Fungi," *J. Am. Oil Chem. Soc.*, 65:1455
	Totani, et al. (1988), in "Production of Arachidonic Acid by *Mortirella alpina*," ISF-JOCS World Conference
	Shimizu, et al. (1988), "Production of C-20 Polyunsaturated Fatty Acids by Fungi," ISF-JOCS World Conference
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KD	4,810,497	3/89	Horrobin	424	153	
	4,826,877	05/89	Stewart, et al.	514	560	
	5,116,871	05/92	Horrobin	514	560	8/89
	5,120,760	06/92	Horrobin	514	458	6/89
KD	5,198,468	03/93	Horrobin	514	558	6/88

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO	

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KD	Shimizu, et al. (1989), "Conversion of Linseed Oil to an Eicosapentaenoic Acid-Containing Oil by *Mortierella alpina* 1S-4 at Low Temperature," *Appl. Microb. Biotechnol.*, 31:1-4)
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	Shifrin, 1984, "Oils From Microalgae," in Biotechnology for the Oils and Fats Industry, Ratledge, et al., eds., American Oil Chemists Society, Champaign, IL, pp. 145-162
KD	Yongmanitchai, et al., "Omega-3 Fatty Acids: Alternative Sources of Production," *Process Biochem.*, 24:117-125 (1989)
	~~Volkman, et al., 1989, "Fatty Acid and Lipid Composition of 10 Species of Microalgae Used in Mariculture," *J. Exp. Mar. Biol. Ecol.*, 128:219-240~~
	~~Ben-Amotz., 1985, "Chemical Profile of Selected Species of Microalgae With Emphasis on Lipids," *J. Phycol.*, 21:72-81~~
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KD	Harrington, et al., "The Polyunsaturated Fatty Acids of Marine Dinoflagellates," *J. Protozool.*, 17:213-219, 1970
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	Harzer, et al., 1983, "Changing Patterns of Human Milk Lipids in the Course of the Lactation and During the Day," *Am. J. Clin. Nutr.*, 37:612-621
KD	Kame, et al., 1984, "Use of Fish Oil Fatty Acids (EPA and DHA) in Nutrition-Supplementing Foods and in Drugs," *Chem. Abst.*, 100:66638d
	~~Liu, et al., 1987, "Increase in Plasma Phospholipid Docosahexaenoic and Eicosapentaenoic Acids as a Reflection of Their Intake and Mode of Administration," *Pedatr. Res.*, 22:292-296~~
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KJ	2,611,706	09/52	Bernhart, et al.	99	118	
	2,923,628	02/60	Otto	99	63	
	3,458,625	07/69	Ensor, et al.	424	95	
	3,542,560	11/70	Tomarelli, et al.	99	63	
	3,649,295	03/72	Bernhart, et al.	99	57	
	4,058,594	11/77	Williams	424	37	
	4,216,236	08/80	Mueller, et al.	426	72	
	4,282,265	08/81	Theuer	426	607	
	4,303,692	12/81	Gaull	426	580	
	4,513,008	04/85	Recivi, et al.	514	560	
	4,544,559	10/85	Gil, et al.	426	72	
KJ	4,614,663	09/86	Rule	426	601	

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~~—~~	~~60/160 840~~	~~12/83~~	~~Japan~~				
	64/080 250	3/89	Japan	—	—		
	WO 90/13656	11/90	International Application	—	—		
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KJ	Carlson, 1987, "Effect of Fish Oil Supplementation on the n-3 Fatty Acid Content of Red Blood Cell Membranes in Preterm Infants," *Pediatri. Res.*, 21:507-510
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KJ	4,752,618	06/88	Mascioli, et al.	514	549	
	4,780,456	10/88	Pistolesi, et al.	514	78	
	4,820,731	04/89	Mascioli, et al.	514	549	
	4,843,095	06/89	Rubin	514	558	
	4,874,603	10/89	Fratzer	424	10	
	4,876,107	10/89	King, et al.	426	601	
	5,234,702	08/93	Katz, et al.	426	72	3/92
KJ	5,338,673	08/94	Thepenier, et al.	435	134	1/93

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KJ	Yeh, et al., 1990, "Enrichment of (n-3) Fatty Acids of Suckling Rats by Maternal Dietary Menhaden Oil," *J. Nutr.*, 120
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EXAMINER Kim Yeo	DATE CONSIDERED 9/29/95

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KJ	Bourre, et al., 1990, "Desaturase in Brain and Liver During Development and Aging," *Lipids*, 25:354-356
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KJ	Kyle, 1991, *Adv. Applied Biotech.*, 12
KJ	Carlson, et al., 1992, *Essential Fatty Acids And Eicosenoids*, Sinclair, et al., eds., American Oil Chem. Society, Champaign, Illinois

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